FreeCon WAB-3000

Wireless Mesh Outdoor AP/Bridge

Wireless Outdoor Mesh Access Point
The LevelOne WAB-3000 is a Wireless outdoor Access Point that is able to automatically configure and operate within a 40 node wireless Mesh network. It is hosed in a IP66 casing for outdoor use as an access point, bridge or signal repeater with a minimum range of 1,400 feet.

Dual Radios for 802.11b/g/a Operations
The WAB-3000 operates on both the 2.4 GHz and 5GHz radio bands and incorporates the IEEE 802.11a/b and 802.11g wireless radio standards on both AP and bridging ports to give maximum flexibility when setting up an outdoor wireless network. The WAB-3000 further provides Super G™ and Turbo A wireless network connectivity to provide a wireless network with data transfer rates of up to 108 Mbps.

Self-Forming, Self-Configuring, Self-Healing mesh network
WAB-3000 allows users to build a self-organizing mesh network which doesn't require manual configuration. Adding new AP nodes or relocating existing Access Points are as easy as powering them on and place them within the network coverage range.

The network automatically detects and configures the new or relocated nodes and incorporates them into the existing mesh networking system. WAB-3000 is also a highly adaptable self-healing node with repairing "dead-paths" through multiple paths between alternative nodes.

Advanced Security Features
In order to protect a wireless network from unauthorized access, the WAB-3000 is able to auto-detect and report rogue access points. The wireless network is further protected with 128-bit AES WEP/WPA2/802.11i encryption keys.

Easy Installation and Maintenance
Node management is made easy with its Web-based management interface. With a Web-browser like Internet Explorer, network administrators can easily configure, maintain, and add and remove users from the wireless network.

The 802.1Q/VLAN feature allows for the use of multiple SSIDs for various service types over a common wireless network.

The WAB-3000 also offers a built-in Power over Ethernet (PoE) function to eliminate power cables and adapters when deploying network devices within the wireless network.

WAB-3000

Key Features

- self-configuration, self-healing MESH network - up to 40 nodes
- Supports 802.1Q/VLANfeature allows for the use of multiple SSIDs in a single network
- Detects & reports rogue APs
- Rugged IP 66 casing for outdoor use as a HotSpot or repeater
- Dual Radios: 802.11a/b/g for both AP and Bridging
- Super G & Turbo A on access point & bridge up to 108 Mbps
- Multiple user configurable modes: access point, wireless bridge, or repeater modes
- Power-over-Ethernet (PoE) functionality
- VLAN 802.1Q and multiple SSIDs
- 64/128/152-bit WEP AES-CCMP/WPA2/802.11i encryption and security keys
- Wireless client load balancing

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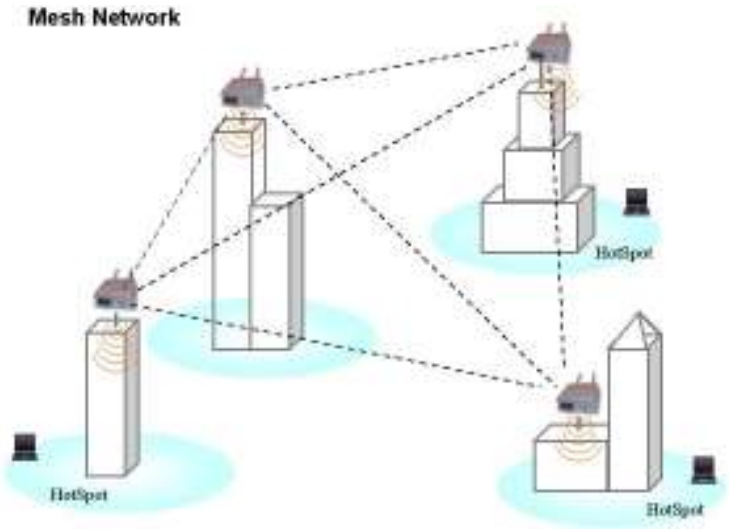
Technical Specification

- **External Ports**
  1 x 10/100 Mbps WAN Ethernet port
  1 x 10/100Mbps LAN port
  3 x External antenna ports
- **WAN Ethernet Setting**
  Fixed IP
  DNCP client
  Supports 10/100 Mbps auto negotiation
- **LAN Ethernet Setting**
  10/100 mbps full/half duplex auto negotiation
- **Device Management**
  Web Server/ HTTPS
  Supports SNMP v1, v2, v3 agent
  Multiple user privileges
- **Power**
  Input Voltage: 24 VDC
  Injector input: 100~240 VAC, 50~60Hz
  Power Consumption: 25W
- **Environment & Safety**
  Operating Temperature: -5℃~+50℃
  Storage Temperature: -40℃~+80℃
  Operating Humidity: 0~95% non-condensing
  EMI/Safety: FCC Class A, CE
- **Physical Spec**
  Dimensions: 23.5cm(L) x 21.0cm(W) x 7.62cm (H)
  Weight: 2.5 Kg(5.5lbs)
- **LEDs**
  Power
  WAN
  WLAN1: Activity light/ Link Ind.
  WLAN2: Activity light/ Link Ind.
  WLAN: Signal Strength
- **Wireless interface**
  802.11a/b/g for AP & bridge with Super G (Turbo A optional)
- **Operation Mode**
  Access Point, Bridge/ Repeater
- **Self-Forming, Self-configuring, self-organizing mesh**
  Up to 40 nodes
- **Channel Number**
  Fixed or automatic select (optimum)
- **Antennas**
  2 x 5dBi for 802.11a and 2.5dBi for 802.11b/g Dual band omni directional antenna
- **Enhanced Features**
  Multiple SSIDs, VLAN 802.1Q
  802.11a Dynamic Frequency Selection
  802.11a Transmit Power control
  Load Balancing of Wireless Clients
- **Security**
  WEP: 64/128/152-bit encryption
  WPA-PSK
  WPA (802.1x) –Dynamic Key
  WPA2/ 802.11i
  AES-CCMP: 128-bit encryption
  Enable/disable broadcast SSID
  MAC address filtering
  Rogue wireless AP detection with email notification
- **Wireless AP and wireless client activities monitoring**
  Signal strength
  MAC address listing of wireless clients
- **Tools and Utilities**
  Ping Utility – Trace route utility
  Trace route utility
  Firmware upgrade via web
  Reboot device
  Factory default

Product Diagram



Ordering Information

- WAB-3000: Wireless Mesh Outdoor AP/Bridge